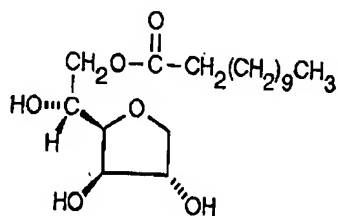
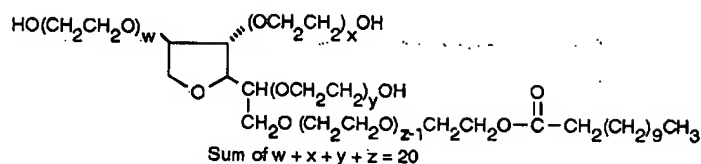


## I Claim:

1. A method for resistivity imaging a formation during drilling a wellbore in said formation with an electrically conductive oil-based drilling fluid, said fluid comprising a polar ester oil-base, a sorbitan ester derivative surfactant, and an ethoxylated sorbitan ester derivative surfactant, wherein said surfactants are in quantities sufficient to create micelles having enhanced concentration in the palisade layer.
2. The method of claim 1 wherein said micelles in the palisade layer are packed sufficiently close to yield a rigid surfactant film.
3. The method of claim 1 wherein said fluid is prepared by formulating an invert emulsion comprising said base oil to which is added said ethoxylated sorbitan ester derivative followed by said sorbitan ester derivative.
4. The method of claim 1 wherein said emulsion comprises about 85 to about 95 volume percent ester and about 5 to about 15 volume percent brine.
5. The method of claim 4 wherein said ester comprises said ester base oil, said sorbitan ester derivative, and said ethoxylated sorbitan ester derivative.
6. The method of claim 1 wherein said sorbitan ester has the formula:



7. The method of claim 1 wherein said ethoxylated sorbitan ester has a formula the same as or similar to:



8. The method of claim 1 wherein said sorbitan ester derivative and said ethoxylated sorbitan ester derivative are complimentary.

9. The method of claim 1 wherein said polar ester oil-base comprises a monocarboxylic acid ester of a  $C_2$  to  $C_{12}$  monofunctional alkanol.

10. A method for drilling a wellbore while resistivity imaging the formation in which the wellbore is being drilled, said method comprising using an electrically conductive oil based drilling fluid, said fluid comprising complimentary fatty acid surfactants and a polar base oil.

11. The method of claim 10 wherein at least one of said complimentary fatty acid surfactants is more water soluble than the others and at least one of the other complimentary fatty acid surfactants is more water soluble than the others.

12. The method of claim 10 wherein said complimentary fatty acid surfactants are selected from the group comprising sorbitan esters, sorbitan ester derivatives, ethoxylated sorbitan esters, ethoxylated sorbitan ester derivatives, and combinations thereof.

13. A drilling fluid comprising a polar base oil and complimentary surfactants such that said surfactants form micelles having denser concentration in the palisade layer of said fluid than any surfactant would have alone.
- 5 14. The drilling fluid of claim 13 wherein said polar base oil is a synthetic ester based oil.
15. The drilling fluid of claim 13 wherein said base oil and surfactants comprise the oil based layer of an invert emulsion.
- 10 16. The drilling fluid of claim 15 wherein said base oil and said surfactants comprise about 90 volume percent of said emulsion.
17. The drilling fluid of claim 16 wherein calcium chloride brine comprises the water phase of said emulsion
- 15 18. The drilling fluid of claim 17 wherein said surfactants are fatty acid surfactants.
19. The drilling fluid of claim 13 further comprising a fluid loss additive.
- 20 20. The drilling fluid of claim 19 wherein said fluid loss additive is selected from the group comprising: oleic acid; quaternary ammonium compounds; calcium carbonates; styrene butadiene; and combinations thereof.